

CLAIMS

1-22 Canceled

23. (Previously amended) An electrohydraulic brake system for motor vehicles comprising:

a brake pressure sensor, which can be actuated by a brake pedal;

a pressurizing medium reservoir, having at least one electrohydraulic pressure source, by which pressure can be applied to wheel brakes of the motor vehicle, wherein the brakes can be connected via at least one hydraulic connection, which can be sealed off by a separation valve;

a device for identifying a deceleration instruction from a driver;

inlet valves which are connected before the wheel brakes and outlet valves which are connected after the wheel brakes;

an electronic control and regulation unit, which, as a function of signals which are generated by the device for the detection of deceleration instruction from a driver, actuates the pressure source, the separation valve, as well as the inlet valves and the outlet valves; and

a valve block, which receives the separation valve, as well as the inlet valves and the outlet valves, where the pressure source, the wheel brakes as well as the brake pressure sensor can be connected with the pressurizing medium reservoir, wherein the brake pressure sensor (2) is integrated in the valve block (16) in such a manner that all of the hydraulic connections between the brake pressure sensor (2) and the separation valve (27-30), of which there is at least one, as well as the inlet valves (47-50) are formed by bores in the valve block (16).

24. (Previously amended) An electrohydraulic brake system according to claim 23, wherein the electrohydraulic pressure source consists of a pump (26) which is driven

by an electromotor (21) and which is also integrated in the valve block (16) in such a manner that the connections between the pump (26) and the inlet valves (47-50) consist of bores in the valve block (16).

25. (Previously amended) An electrohydraulic brake system according to claim 23, wherein the electrohydraulic pressure source consists of a high-pressure reservoir, which is loaded by means of a motor-pump aggregate.
26. (Previously amended) An electrohydraulic brake system according to claim 23, wherein the pressurizing medium reservoir (6) is arranged on the valve block (16) and it is formed in its entirety or partially by the valve block (16), and in that the hydraulic connections between the pressure source (26) and the pressurizing medium reservoir (6), as well as between the hydraulic connections between the brake pressure sensor (2) and the pressurizing medium reservoir (6), consists of bores in the valve block (16).
27. (Previously amended) An electrohydraulic brake system according to claim 23, wherein the electronic control and regulation unit (14) is attached directly to the valve block (16) in such a manner that electrical, magnetic and thermal signal and power transmissions occur without the use of lines.
28. (Currently amended) An electrohydraulic brake system according to claim 27, wherein ~~that~~ the hydraulic connection (22) between the pressure source (26) and the pressurizing medium reservoir (6), and optionally parts of the pressure medium reservoir (6) can be heated.
29. (Currently amended) An electrohydraulic brake system according to claim 23, wherein the valve block (16) and a piston rod (24), which is used to actuate the brake pressure sensor (2), are connected in a manner which allows elastic oscillations with the body₁ of a dashboard (66) of the motor vehicle₁ or to a pedal

30. (Previously amended) An electrohydraulic brake system according to claim 23, wherein the pressurizing medium reservoir (6) presents a first chamber (61) as well as a second chamber (62), where the aspiration side of the pump (26) and, via the outlet valves (57-60), the wheel brakes (17-20) are connected to the first chamber (61), while the brake pressure sensor (2) is connected to the second chamber (62) via a first, current-free closed (CC) valve (5), which can be regulated by analog means.
31. (Previously amended) An electrohydraulic brake system according to claim 31, wherein one or more devices (11, 12) are provided for detecting the pressurizing medium level in the first and the second chamber (61-62).
32. (Previously amended) An electrohydraulic brake system according to claim 23, wherein the brake pressure sensor (2) is connected to the input connection of the inlet valves (47-50) via a second, current-free closed (CC) valve (13), which can be regulated by analog means.
33. (Previously amended) An electrohydraulic brake system according to claim 23, wherein the inlet valves and the outlet valves (47-50, 57-60) are designed as electromagnetically activated, current-free closed (CC) 2/2-way control valves.
34. (Currently amended) An electrohydraulic brake system according to claim 23, wherein there are more than one separation valves and a ~~the~~ separation valves (27, 28, 29, 30) is assigned to each wheel brake (17, 18, 19, 20), and in that the separation valves (27-30) are designed as electromagnetically activated, current-free open (CO) valves, which can be regulated by analog means.
35. (Withdrawn) An electrohydraulic brake system according to claim 34, wherein the

- brake pressure sensor (2) is designed as a two-circuit main brake cylinder, whose secondary pressure space (45) is connected via the first, current-free closed (CC) valve (5), which can be regulated by analog means, to the second chamber (62), while the primary pressure space (25) of said cylinder is connected via an electromagnetically actuated 2/2-way control valve (32) to the secondary pressure space (45).
36. (New) An electrohydraulic brake system according to claim 23, wherein the brake pressure sensor (2) is designed as a single-circuit main brake cylinder.
37. (Withdrawn) An electrohydraulic brake system according to claim 23, wherein a hydraulic pressure space (33) is connected before the piston (42) of the main brake cylinder (2), where the pressure space receives pressure that is generated by the pump (26).
38. (Withdrawn) An electrohydraulic brake system according to claim 37, wherein the line (34) which connects the pressure side of the pump (26) to the pressure space (33), an electromagnetically activated, current-free (CO) 2/2-way or control valve (35) is inserted, which makes it possible to cut off the line (34).
39. (Withdrawn) An electrohydraulic brake system according to claim 37, wherein the hydraulic pressure space (33) is connected with the insertion of a check valve (41) to the pressuring medium reservoir (6).
40. (Withdrawn) An electrohydraulic brake system according to claim 37, wherein the piston (42) delimits a trailing space (44), which is connected to the pressurizing medium reservoir (6), which in turn is connected via the check valve (41) to the pressure space (33).
41. (Withdrawn) An electrohydraulic brake system according to claim 37, wherein an air

- regulator (53) is provided between the check valve (41) and the pressurizing medium reservoir (6), and a parallel connection is provided between the hydraulic series connection, which consists of the check valve (41) and the air regulator (53), and an electromagnetically activated, current-free open (CO) control valve (52).
42. (Withdrawn) An electrohydraulic brake system according to claim 23, wherein the pressure sensor (2) is connected to the aspiration side of the pump (26) and, between the connection of the pressure sensor (2) and the pressurizing medium reservoir (6), a check valve (56) is arranged, which opens towards the pump (56).
43. (Canceled)
44. (Canceled)

REMARKS

Claims 23-44 were pending in the application with claims 35 and 37-42 withdrawn as being subject to a restriction requirement. Claims 23-34, 43, and 44 were rejected for the reasons discussed below. Claims 44 and 45 have been canceled.

The Examiner objected to the drawings for having element "39" which was not included in the specification and objected to the specification for minor informalities. The specification has been amended to include "39" and to correct the other informalities. Accordingly, it is believed that drawings and specification are proper.

The Examiner rejected claims 29, 34, 43, and 44 under 35 U.S.C., second paragraph, as being vague and indefinite. The claims have been amended accordingly and Applicant submits that these rejections should be withdrawn.

The Examiner rejected claims 23, 29, 32, and 36 under a combination of four references, Enomoto et al. (US Patent 5,568,962), Maehara (US Patent 5,069,508), Hinz et al. (US Patent 6,007,162), and Halsey et al. (US Patent 3,133,611). It is submitted that the claims are patentable over the cited references for at least the following reasons.

Claim 23 is directed to a hydraulic brake system having a valve block, which receives the separation valve, as well as the inlet valves and the outlet valves. The pressure source, the wheel brakes and the brake pressure sensor can be connected with the pressurizing medium reservoir. Furthermore, the brake pressure sensor (2) is integrated in the valve block (16) in such a manner that all of the hydraulic connections between the brake pressure sensor (2) and the separation valve (27-30), of which there is at least one, as well as the inlet valves (47-50) are formed by bores in the valve block (16).

It is submitted that none of the cited references teach, suggest or disclose, either alone or in combination, the embodiment recited in claim 23. For example, Enomoto et al. and Halsey et al. fail to disclose or suggest having all of the hydraulic connections